

L Number	Hits	Search Text	DB	Time stamp
8	51	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.	USPAT; US-PGPUB	2002/05/16 08:45
9	246	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.	USPAT; US-PGPUB	2002/05/16 08:42
10	195	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.)	USPAT; US-PGPUB	2002/05/16 08:42
11	9	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (paint\$3 or coat\$3) and clean\$3	USPAT; US-PGPUB	2002/05/16 08:44
12	18	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (paint\$3 or coat\$3) and (cur\$3 or heat\$3)	USPAT; US-PGPUB	2002/05/16 08:45
13	10	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (paint\$3 or coat\$3) and (cur\$3 or heat\$3)) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing)).ti.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (paint\$3 or coat\$3) and clean\$3	USPAT; US-PGPUB	2002/05/16 08:45
14	723	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2002/05/16 08:48
15	7	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2002/05/16 08:51
16	16	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2002/05/16 08:50
17	12	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ab.) not ((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ti.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2002/05/16 08:50
18	27	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2002/05/16 08:51

19	15	((((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses)) not (((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ab.) not (((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and (stations or facilities or buildings or warehouses).ti.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/16 08:52
20	2	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and ((paint\$3 or coat\$) and (cur\$3 or heat\$3) and clean\$3).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/16 08:55
21	2	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and ((paint\$3 or coating) and (cur\$3 or heat\$3) and clean\$3).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/16 08:56
22	12	((automobile or vehicle or car or truck) and (repair\$3 or refurbish\$3 or fixing) and (process or procedure or method)).ti.) and ((paint\$3 or coating) and (cur\$3 or heat\$3) and clean\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/16 09:27

5/7/2 (Item 2 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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011917999 **Image available**
WPI Acc No: 1998-334909/199830

**Workpiece storage and transfer system for flexible workstation -
comprises mobile racks for carrying vertically-attached workpieces, and
which travel on rail network between store and workstation**

Patent Assignee: AMOUSSINE M (AMOU-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 29805501	U1	19980618	DE 98U2005501	U	19980326	199830 B

Priority Applications (No Type Date): DE 98U2005501 U 19980326

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 29805501	U1		36 B23Q-039/00	

Abstract (Basic): DE 29805501 U

The system comprises racks (1) in which workpieces can be stored on carriers (2), and from which the carriers can be transferred to and/or from a workstation. The rack has vertical rails which have brackets (3) with dowels pegs (4) to engage with locating holes (6) in the carriers. The rack has a **transfer table** (7) which has at least one dowel peg (11) which to engage with transfer holes (14) in the carrier.

Racks are arranged in the storage area in parallel rows, and travel to and from the workstation on a system of rails, which comprise straight and/or curved rails with or without points on one level or more.

USE - For storing for, and transferring to and from palletised or non-palletised workpieces for a flexible machining, forming or assembly workstation.

ADVANTAGE - Requires less floor area for a given capacity, and is easier to maintain and **repair** than known systems.

Dwg.1,2/28

Derwent Class: P56; P62; Q38

International Patent Class (Main): B23Q-039/00

International Patent Class (Additional): B23P-021/00; B23Q-007/00;

B23Q-037/00; B23Q-041/06; B25H-001/00; B66F-009/07

?

8/7/1 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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1707641 NTIS Accession Number: PB93-145753

Commuter Rail State-of-the-Art: A Study of Current Systems

(Final rept)

Shen, L. D. ; Wu, J. W.

Florida International Univ., Miami. Dept. of Civil and Environmental Engineering.

Corp. Source Codes: 056181002

Sponsor: Federal Transit Administration, Washington, DC. Office of Technical Assistance and Safety.

Report No.: FTA-FL-11-0018-92-1

Dec 92 111p

Languages: English

Journal Announcement: GRAI9308

Sponsored by Federal Transit Administration, Washington, DC. Office of Technical Assistance and Safety.

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NTIS Prices: PC A06/MF A02

Country of Publication: United States

The report documents the results of the state-of-the-art study on current commuter rail systems in the United States. Detailed information on operations, fare collection, **stations**, **maintenance** facilities, patronage, **railcars**, and feeder systems are presented. This commuter rail report is intended to provide a database of actual operation statistics for the 12 commuter rail systems in the United States. Statistics were collected on existing commuter rail services through Federal Transit Administration (FTA) reports, American Public Transit Association (APTA) and railroad industry publications. In addition, a survey was also conducted to collect the pertinent information on existing systems. A comparative analysis of commuter rail service with respect to other mass transit systems was conducted. New and proposed systems are also discussed. Current trends in commuter rail operations are presented. Startup costs for new systems were analyzed. This report found that many cities are considering commuter rail as a potential part of the solution to local transportation problems.

8/7/5 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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01585972 E.I. Monthly No: EI8411122877 E.I. Yearly No: EI84105050

Title: SHOPS FOR THE NEW ERA.

Author: Shedd, Tom

Corporate Source: Modern Railroads, Park Ridge, Ill, USA

Source: Modern Railroads v 39 n 8 Aug 1984 p 24-26

Publication Year: 1984

CODEN: MORRAS

Language: ENGLISH

Journal Announcement: 8411

Abstract: It is important to minimize not only the distance and time of handling components under **repair** but also the time and distance expended by **repair** parts and workers. Thus efficient work stations will have parts and tools stored at or near each work station. The dead units are moved with a road- **rail** car mover whose operator can control the **transfer table** operation from his cab. At the north end, locomotives are moved onto one of several shop tracks via the **transfer table**, depending on the type of **repair** work to be done. At the south end, units undergoing rebuilding or remanufacture emerge from the shop and are moved via the **transfer table** back into the building on one of the production

reassembly tracks. In this case, space limitations made **transfer tables**
mandatory - there wasn't room for switching tracks.
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1/5/2

DIALOG(R)File 348:EUROPEAN PATENTS

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01287847

METHOD AND ARRANGEMENT FOR INSPECTION AND REQUALIFICATION OF VEHICLES USED FOR TRANSPORTING COMMODITIES AND/OR HAZARDOUS MATERIALS

PROCEDE ET DISPOSITIF D'INSPECTION ET DE REEVALUATION DE VEHICULES UTILISES POUR LE TRANSPORT DE MARCHANDISES ET/OU DE PRODUITS DANGEREUX

PATENT ASSIGNEE:

General Electric Railcar Services-Corporation, (3299630), 33, West Monroe, Chicago, IL 60603, (US), (Applicant designated States: all)

INVENTOR:

BARICH, Daniel, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

DONAHUE, Timothy, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

EUNG, Michael, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

PATENT (CC, No, Kind, Date):

WO 200125739 010412

APPLICATION (CC, No, Date): EP 2000973392 000929; WO 2000US26720 000929

PRIORITY (CC, No, Date): US 157058 P 991001

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G01L-003/26; G01L-005/13; G01M-017/00

CITED PATENTS (WO A): US 5631831 A ; US 5717595 A ; US 5964811 A ; US

6052631 A ; US 6070111 A ; US 6101433 A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010606 A1 International application. (Art. 158(1))

Application: 010606 A1 International application entering European phase

LANGUAGE (Publication,Procedural,Application): English; English; English

1/5/3

DIALOG(R)File 348:EUROPEAN PATENTS

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01287808

METHOD AND DATABASE ARRANGEMENT FOR INSPECTION AND REQUALIFICATION OF VEHICLES USED FOR TRANSPORTING COMMODITIES AND/OR HAZARDOUS MATERIALS

PROCEDE ET ARRANGEMENT DE BASE DE DONNEES DESTINES A L'INSPECTION ET A LA REEVALUATION DE VEHICULES UTILISES POUR LE TRANSPORT DE MARCHANDISES ET/OU DE PRODUITS DANGEREUX

PATENT ASSIGNEE:

General Electric Railcar Services-Corporation, (3299630), 33, West Monroe, Chicago, IL 60603, (US), (Applicant designated States: all)

INVENTOR:

BARICH, Daniel, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

DONAHUE, Timothy, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

KOZLOWSKI, Arthur, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

PATENT (CC, No, Kind, Date):

WO 200125968 010412

APPLICATION (CC, No, Date): EP 2000972001 001002; WO 2000US27118 001002

PRIORITY (CC, No, Date): US 157057 P 991001

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30; H04Q-007/00; H04Q-003/70;

G06G-001/14

CITED PATENTS (WO A): US 4247757 A ; US 5008661 A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010606 A1 International application. (Art. 158(1))

Application: 010606 A1 International application entering European phase

LANGUAGE (Publication,Procedural,Application): English; English; English

1/5/4

DIALOG(R) File 348:EUROPEAN PATENTS

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01286898

**METHOD AND ARRANGEMENT FOR INSPECTION AND REQUALIFICATION OF LINED VEHICLES
USED FOR TRANSPORTING COMMODITIES AND/OR HAZARDOUS MATERIALS
PROCEDE ET SYSTEME DESTINES A L'INSPECTION ET A LA REFECTION DES VEHICULES
A REVETEMENT UTILISES POUR LE TRANSPORT DE MARCHANDISES ET/OU DE
MATERIAUX DANGEREUX**

PATENT ASSIGNEE:

General Electric Railcar Services-Corporation, (3299630), 33, West Monroe
, Chicago, IL 60603, (US), (Applicant designated States: all)

INVENTOR:

BARICH , Daniel, E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

DONAHUE, Timothy, G.E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

EUNG, Michael, E. Capital, 33 West Monroe, Chicago, IL 60603, (US)

PATENT (CC, No, Kind, Date):

WO 200125771 010412

APPLICATION (CC, No, Date): EP 2000965510 000929; WO 2000US26719 000929

PRIORITY (CC, No, Date): US 157055 P 991001

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G01N-027/00

CITED PATENTS (WO A): US 6047241 A ; US 5757419 A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010606 A1 International application. (Art. 158(1))

Application: 010606 A1 International application entering European
phase

LANGUAGE (Publication,Procedural,Application): English; English; English

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8/7/6 (Item 5 from file: 8)
DIALOG(R) File 8:EI Compendex(R)
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01582168 E.I. Monthly No: EI8411122875 E.I. Yearly No: EI84105048

Title: MP's 21ST CENTURY SHOP.

Author: Anon

Source: Railway Age v 185 n 8 Aug 1984 p 67-68

Publication Year: 1984

CODEN: RAAGA3 ISSN: 0033-8826

Language: ENGLISH

Journal Announcement: 8411

Abstract: Designed to service a fleet that will increase substantially by the year 2000, the new locomotive shop at North Little Rock is a model of ease of **maintenance**, energy efficiency, and aesthetics. The main building can accommodate 34 locomotives at a time. A north-end **transfer table** reaches 30 tracks; and a south-end table reaches four shop tracks, 17 storage tracks, the run-around track, and the south shop lead. A rubber-tired car mover equipped with hi-**rail** attachments handles locomotive movements throughout the facility. There, the new facility replaces four buildings, three of which were built in 1904 for steam locomotives and converted to handle diesels in the 1950s. The fourth was a 30-year-old steel shed.

8/7/7 (Item 6 from file: 8)
DIALOG(R) File 8:EI Compendex(R)
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00120012 E.I. Monthly No: EI71X008396

Title: IC opening its new 14 million dollar maintenance facility.

Author: ANON

Source: Railway Locomotives and Cars v 144 n 6 June 1970 p 24-6, 28-9

Publication Year: 1970

CODEN: RLCAA

Language: ENGLISH

Journal Announcement: 71X0

Abstract: The Illinois Central's new locomotive and car **maintenance** complex near Chicago handles locomotives, and intercity and suburban passenger equipment. Fueling is done at 17 stanchions as units enter the shop. The warm- air blowers dry the unit as it emerges from locomotive laundry. The **transfer table** is vital feature at the center of main shop building. Other features include a suction arrangement for removal of dust and debris, and chutes for used filters which lead directly to the outdoor skids designed for fork- lift compatibility.

8/7/8 (Item 7 from file: 8)
DIALOG(R) File 8:EI Compendex(R)
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00074895 E.I. Monthly No: EI70X018119

Title: N&W shop has transfer table . Ability to classify cars after inspection speeds repairs .

Author: ANON

Source: Ry Locomotives & Cars v 143 n 9 Sept 1969 p 31-3

Publication Year: 1969

Language: ENGLISH

Journal Announcement: 70X0

Abstract: New shop of the Norfolk & Western at Bellevue, Ohio features three- track facility and handles 70 cars daily. Unusual in the design of the shop are the **transfer tables** used to classify bad- order cars in terms of the quantity of work they will require, and the gantry which runs over the "fast" track, carrying all the tools and parts needed to **repair** cars which must be back in trains in minimum time.

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8/7/17 (Item 2 from file: 63)
DIALOG(R) File 63:Transport Res(TRIS)
(c) fmt only 2002 Dialog Corp. All rts. reserv.

00241699 DA

TITLE: AIRPORT PEOPLE MOVER: "MOST SOPHISTICATED" SYSTEM BEING TESTED IN SEATTLE

CORPORATE SOURCE: American Transport Association, Suite 2900, 465 1'Enfant Plaza West, SW, Washington, DC, 20024,

JOURNAL: Passenger Transport Vol: 35 Issue Number: 19 Pag: p 8

PUBLICATION DATE: 19720512 PUBLICATION YEAR: 1972

LANGUAGE: English SUBFILE: ATRIS; HRIS (A 77S1; H)

ABSTRACT: WESTINGHOUSE ELECTRIC CORP. HAS BEGUN TESTING THE VEHICLES AND AUTOMATIC **TRAIN** CONTROLS FOR THE NEW PASSENGER TRANSIT SYSTEM BEING INSTALLED AT THE SEATTLE-TACOMA INTERNATIONAL AIRPORT. NINE 106-PASSENGER VEHICLES WILL CARRY AIR TRAVELERS TO AND FROM THEIR BOARDING GATES. THE LIGHTWEIGHT ELECTRIC VEHICLES HAVE RUBBER TIRES AND ARE PROPELLED BY 100-HORSEPOWER MOTORS, PROVIDING SMOOTH, QUIET, FUME-FREE OPERATION. THE ENTIRE SYSTEM IS SCHEDULED TO GO INTO OPERATION LATER THIS YEAR. AUTOMATIC OPERATION WILL BE SUPERVISED BY A CENTRAL CONTROL COMPUTER, WHICH WILL CONTROL STATION DWELL TIMES AND MAKE SURE THE TRAINS ARE PROPERLY SPACED ON THE SYSTEM AT ALL TIMES FOR PASSENGER CONVENIENCE. TESTS ALSO ARE BEING CONDUCTED ON **TRANSFER TABLES** THAT WILL BE USED TO MOVE THE VEHICLES OFF OR ON THE GUIDEWAYS FOR **MAINTENANCE** OR OPERATION. STARTUP TESTS ARE ALSO UNDERWAY ON THE STATION DOORS AND COMMUNICATIONS AND POWER SYSTEMS.

SUBJECT HEADING: A03,AIRPORTS; A01; H12,PLANNING

2/7/10 (Item 4 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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01486083 JICST ACCESSION NUMBER: 92A0090020 FILE SEGMENT: JICST-E
The direction of the maintenance of tomorrow. Railcar maintenance of Kintetsu.

IIDA TOSHITAKE (1)

(1) Kinki Nippon Railway Co., Ltd.

Sharyo to Kikai, 1992, VOL.6,NO.1, PAGE.31-34, FIG.6

JOURNAL NUMBER: Z0898BAD ISSN NO: 0913-7971

UNIVERSAL DECIMAL CLASSIFICATION: 629.4.08

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: Kinki Nippon Railway has 27 trunk and branch lines in the Kinki and Tokai areas, 591.7km of commercial lines and 1919 **railcars** in November, 1991. This paper reports the present situation of general inspection and important-part inspection intensively conducted at 2 inspection- **repair stations** in Goido and Shiohama. This paper also describes the following. 1) Maintenance free of car bodies body structure and electric circuits. 2) Unification of maintenance parts. 3) Inspection automation and labor saving equipment. 4) Ideal **railcar** maintenance in the future.

2/7/11 (Item 5 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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01486080 JICST ACCESSION NUMBER: 92A0090017 FILE SEGMENT: JICST-E
The direction of the maintenance of tomorrow. Present situation and future of railcar maintenance.

SHINODA MASARU (1)

(1) Seibu Railway Co., Ltd.

Sharyo to Kikai, 1992, VOL.6,NO.1, PAGE.20-23, FIG.3, TBL.1

JOURNAL NUMBER: Z0898BAD ISSN NO: 0913-7971

UNIVERSAL DECIMAL CLASSIFICATION: 629.4.08

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: SEIBU RAILWAY has 2 trunk lines, the Ikebukuro Line and Shinjuku Line, and 1064 electric **railcars** for its total extension of 178.4km as of September, 1991. This paper describes the following. 1) Chronology of **railcar** maintenance operations from the start of the Musashino Railway, former body of the company, in May, 1912. 2) Postwar plans for electric **railcar** modernization. 3) Present situation of car factories and car **maintenance stations** in charge of maintenance and inspection and repair works. 4) Innovation in inspection and repair by the introduction of VVVF inverter control.

?

2/7/47 (Item 35 from file: 148)
DIALOG(R) File 148:Gale Group Trade & Industry DB
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04165443 SUPPLIER NUMBER: 07844677 (THIS IS THE FULL TEXT)
Cut costs with on-site repair (Union Tank Car's arrangement with Chevron U.S.A. Inc.)
Transportation & Distribution, v30, n8, p31(1)
August, 1989

TEXT:

Olin "Smitty" Smith is one of Union Tank Car's longest term employees, but he hasn't worked on company property for fourteen years. Smith, a rack foreman and inspector, hangs his hard hat in a trailer at an oil refinery in Richmond, CA. Here, he and his four-man crew perform **railcar** repairs for one of Union Tank Car's largest customers, Chevron U.S.A. inc.

For years, Union Tank Car operated a repair shop in Richmond, outside Chevron's refinery. The arrangement to provide mobile service within the company's gates was launched in 1974, when Chevron began rolling 70-car unit trains of crude oil to the Richmond refinery. The surge in UTLX tank car traffic to the refinery led to discussions between Smith and Ben Wimberley, refinery transportation specialist at Chevron's Richmond facility.

Under the agreement, Chevron provides work areas, repair tracks, switching services, utilities, even a small office building. In return, Union Tank Car keeps a full-service mobile unit on the property for repair and maintenance of any cars owned or leased by Chevron.

Efficient work flow

Smith and his crew are equipped to perform virtually any routine **railcar** repair. The crew can work on trucks, brake systems, couplers, valves, and fittings. They can also handle safety valve tests, paint touch-up, and stenciling.

At the Chevron **repair station**, Smith routes cars needing such repairs onto a specially designated track. Another stretch of track is reserved for the inspections required by Chevron before any car is loaded. A third spur track holds cars that require more time-consuming repairs, so they won't hold up the flow of other work.

Win-win relationship

Over the years, the supplier/ customer cooperative effort has worked to everyone's benefit. For Chevron, it has provided significant savings in time and money.

"We have a huge investment in our tank car fleet," notes Wimberley. "To make it pay off, we have to keep the cars rolling as much as possible. We realize a tremendous advantage by being able to service a car with the mobile unit. This means our cars usually return to service the next day, compared to weeks if they are sent to repair shops. "

"The benefits are a two-way street," Smith points out. "Chevron is picking up many of the expenses we would encounter if we were based outside the refinery," he says, "but it's more than that. "They are a major customer, with a substantial number of leased UTLX cars. Since these cars are generally maintained at our expense, we absorb rental charges during out-of-service periods. We can operate more efficiently by being able to service them right on the spot."

This long-term relationship has survived because it meets the needs of both partners. "After all these years, I've always been able to reach at least one crew member for an emergency repair on weekends or in the middle of the night," Wimberley reports. "There's no way I can get this level of service anywhere else." T&D

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ds;show files

Set	Items	Description
S1	14	((RAIL OR RAILROAD OR TRAIN) (3N)CAR? ? OR RAILCAR?) AND (REPAIR? OR MAINTENANCE OR PAINT OR PAINTED OR PAINTING) (2N)STATION? ?
S2	303	TRANSFER()TABLE? ?
S3	291276	RAIL OR RAILROAD OR TRAIN OR RAILCAR
S4	1330834	REPAIR? OR MAINTENANCE OR PAINT OR PAINTED OR PAINTING
S5	5	S2 AND S3 AND S4
S6	5	RD (unique items)
S7	19	S1 OR S6
S8	17	RD (unique items)
File	2:INSPEC 1969-2002/Apr W3	(c) 2002 Institution of Electrical Engineers
File	6:NTIS 1964-2002/May W1	(c) 2002 NTIS, Intl Cpyrght All Rights Res
File	8:Ei Compendex(R) 1970-2002/Apr W3	(c) 2002 Engineering Info. Inc.
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File	31:World Surface Coatings Abs 1976-2002/Apr	(c) 2002 Paint Research Assn.
File	32:METADEX(R) 1966-2002/Jun B2	(c) 2002 Cambridge Scientific Abs
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File	67:World Textiles 1968-2002/Apr	(c) 2002 Elsevier Science Ltd.
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File	99:Wilson Appl. Sci & Tech Abs 1983-2002/Mar	(c) 2002 The HW Wilson Co.
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File	248:PIRA 1975-2002Apr W4	(c) 2002 Pira International
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Set	Items	Description
S1	14	((RAIL OR RAILROAD OR TRAIN) (3N) CAR? ? OR RAILCAR?) AND (REPAIR? OR MAINTENANCE OR PAINT OR PAINTED OR PAINTING) (2N) STATION? ?
S2	303	TRANSFER() TABLE? ?
S3	291276	RAIL OR RAILROAD OR TRAIN OR RAILCAR
S4	1330834	REPAIR? OR MAINTENANCE OR PAINT OR PAINTED OR PAINTING
S5	5	S2 AND S3 AND S4
S6	5	RD (unique items)
S7	19	S1 OR S6
S8	17	RD (unique items)
S9	21	RAILROAD() REPAIR/DE
S10	93	RAILROAD() MAINTENANCE/DE
S11	113	S9 OR S10
S12	111	S11 NOT (S1 OR S6)
S13	111	RD (unique items)
S14	0	S2 AND S13
File	2:INSPEC	1969-2002/Apr W3 (c) 2002 Institution of Electrical Engineers
File	6:NTIS	1964-2002/May W1 (c) 2002 NTIS, Intl Cpyrght All Rights Res
File	8:EI Compendex(R)	1970-2002/Apr W3 (c) 2002 Engineering Info. Inc.
File	14:Mechanical Engineering Abs	1973-2002/May (c) 2002 Cambridge Sci Abs
File	25:Weldasearch	1966-2001/Oct (c) 2002 TWI Ltd
File	31:World Surface Coatings Abs	1976-2002/Apr (c) 2002 Paint Research Assn.
File	32:METADEx(R)	1966-2002/Jun B2 (c) 2002 Cambridge Scientific Abs
File	34:SciSearch(R)	Cited Ref Sci 1990-2002/Apr W4 (c) 2002 Inst for Sci Info
File	35:Dissertation Abs Online	1861-2002/Apr (c) 2002 ProQuest Info&Learning
File	50:CAB Abstracts	1972-2002/Mar (c) 2002 CAB International
File	51:Food Sci.&Tech.Abs	1969-2002/Apr W4 (c) 2002 FSTA IFIS Publishing
File	53:FOODLINE(R): Food Science & Technology	1972-2002/Apr 24 (c) 2002 LFRA
File	65:Inside Conferences	1993-2002/Apr W3 (c) 2002 BLDSC all rts. reserv.
File	67:World Textiles	1968-2002/Apr (c) 2002 Elsevier Science Ltd.
File	94:JICST-EPlus	1985-2002/Mar W2 (c) 2002 Japan Science and Tech Corp (JST)
File	95:TEME-Technology & Management	1989-2002/APR W2 (c) 2002 FIZ TECHNIK
File	99:Wilson Appl. Sci & Tech Abs	1983-2002/Mar (c) 2002 The HW Wilson Co.
File	103:Energy SciTec	1974-2002/Apr B1 (c) 2002 Contains copyrighted material
File	108:AEROSPACE DATABASE	1962-2002/APR (c) 2002 AIAA
File	118:ICONDA-Intl Construction	1976-2002/Apr (c) 2002 Fraunhofer-IRB
File	119:Textile Technol.Dig.	1978-2002/Apr (c) 2002 Inst.of Textile Technology
File	144:Pascal	1973-2002/Apr W3 (c) 2002 INIST/CNRS
File	240:PAPERCHEM	1967-2002/Mar W5 (c) 2002 IPST
File	248:PIRA	1975-2002Apr W4

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File 335:Ceramic Abstracts 1976-2002/Q1
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File 354:Ei EnCompassLit(TM) 1965-2002/Apr W3
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File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
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File 33:Aluminium Ind Abs 1968-2002/May
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***File 6: See HELP CODES6 for a short list of the Subject Heading Codes (SC=, SH=) used in NTIS.**

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File 25:Weldasearch (c) 2002 TWI Ltd

***File 25: Further updates will be added as they become available.**

For more information please see Help News25.

File 32:METADEX(R) (c) 2002 Cambridge Scientific Abs

***File 32: See Help Codes32 for a list of the Alloy Class Codes(CC=) and Alloy Class Names(CN=) used in Metadex.**

File 33:Aluminium Ind Abs (c) 2002 Cambridge Scientific Abs

File 34:SciSearch(R) Cited Ref Sci (c) 2002 Inst for Sci Info

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***File 92: Due to IP format changes the file will not update for several months.**

File 94:JICST-EPlus (c)2002 Japan Science and Tech Corp(JST)

***File 94: There is no data missing. UDs have been adjusted to reflect the current months data. See Help News94 for details.**

File 95:TEME-Technology & Management (c) 2002 FIZ TECHNIK

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File 108:AEROSPACE DATABASE (c) 2002 AIAA

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File 293:Eng Materials Abs(R) (c) 2002 Cambridge Scientific Abs

File 335:Ceramic Abstracts (c) 2002 Cambridge Scientific Abs.

File 434:SciSearch(R) Cited Ref Sci (c) 1998 Inst for Sci Info

File 2:INSPEC (c) 2002 Institution of Electrical Engineers

File 31:World Surface Coatings Abs (c) 2002 Paint Research Assn.

File 35:Dissertation Abs Online (c) 2002 ProQuest Info&Learning

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***File 50: Truncating CC codes is recommended for full retrieval.**

See Help News50 for details.

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File 53:FOODLINE(R): Food Science & Technology (c) 2002 LFRA

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File 103:Energy SciTec (c) 2002 Contains copyrighted material

***File 103: UD=200201B1 is the next update received from the Information Provider after UD=200110B2. For access restrictions see Help Restrict.**

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File 119:Textile Technol.Dig. (c) 2002 Inst.of Textile Technology

File 144:Pascal (c) 2002 INIST/CNRS

File 240:PAPERCHEM (c) 2002 IPST

File 248:PIRA (c) 2002 Pira International

***File 248: Changes have been made to Subject Headings and Codes. See Help Codes248 for a complete list of Subject Headings and Codes.**

File 315:ChemEng & Biotech Abs (c) 2002 DECHEMA

File 354:Ei EnCompassLit(TM) (c) 2002 Engineering Info., Inc.

***File 354: Ei EnCompassLit/Ei EnCompassPat combined usage is limited to 2 hrs/yr.**

File 105:AESIS (c) 2001 Australian Mineral Foundation Inc

***File 105: This file is closed (no updates)**

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***File 252: This is a closed file.**

File 323:RAPRA Rubber & Plastics (c) 2002 RAPRA Technology Ltd

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File 370:Science (c) 1999 AAAS

***File 370: This file is closed (no updates). Use File 47 for more current information.**

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